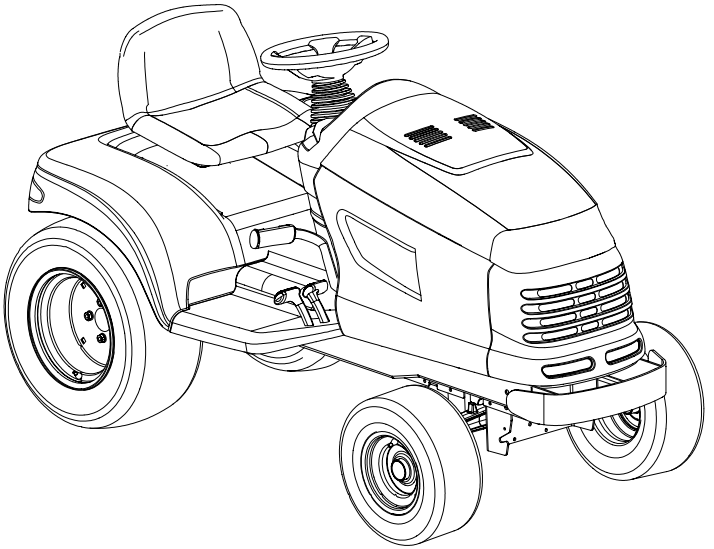
Cub Cadet

OPERATOR'S MANUAL



SERIES 3000
TRACTOR
Model GT 3100

IMPORTANT: READ SAFETY RULES AND INSTRUCTIONS CAREFULLY

Warning: This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester for the muffler is available through your nearest engine authorized service dealer or contact the service department, P.O. Box 361131 Cleveland, Ohio 44136-0019.

CUB CADET LLC P.O. BOX 361131 CLEVELAND, OHIO 44136-0019 [www.cubcadet.com]

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NOTES

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SECTION 1: TRACTOR PREPARATION

Connect the Battery

Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.

The tractor is shipped with a sealed battery, with the positive battery cable factory connected. The negative cable must be connected.

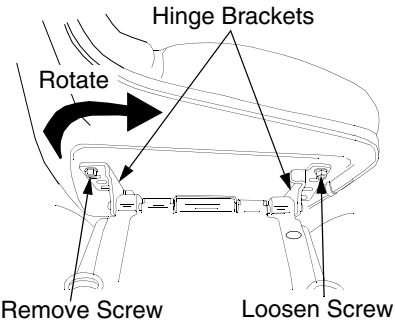
Note: *Make sure the ignition switch is in the "OFF" position before attaching the battery cable.*

- Open the tractor hood. Remove the upper bulkhead baffle from the front of the dash panel by lifting upward on the locking tab on each side of the baffle.
- Remove the protective cap from the negative terminal of the battery.
- Connect the black battery cable to the negative battery post. Slide terminal cover over the connection and reinstall the upper baffle.

Position the High Back Seat

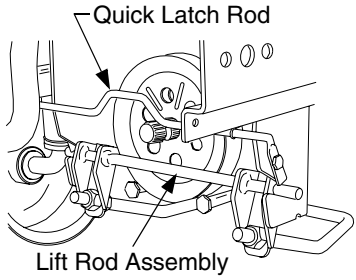
For shipping purposes the seat is installed sideways. Reposition the seat as follows:

- Remove from the seat the two screws NOT fastening the seat to the hinge brackets.
- Loosen the RH screw and remove the LH screw from the seat and hinge bracket.
- Rotate the rear of the seat to the *right* and align the four front seat holes with matching holes in the LH and RH hinge brackets.
- Temporarily install the three previously removed screws into the three open front seat holes.
- See Section 8: **Adjustments** for final seat adjustment procedures.



Deck Front Lift Rod Assembly

For shipping purposes, the deck front lift rod assembly has been installed on the tractor. Cut the tie strap holding the lift rod assembly to the tractor; then pull downward on the quick latch rod at the front of the tractor to remove the lift rod assembly.



SECTION 2: IMPORTANT SAFE OPERATION PRACTICES

WARNING: THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS.READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR UNIT. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL, HEED ITS WARNING.

WARNING: The engine exhaust, some of its constituents, and certain vehicle components contain or emit chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

DANGER: Your lawn mower was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This lawn mower is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

1. GENERAL OPERATION

- Read, understand, and follow all instructions in the operator's manual and on the machine before starting. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
- Only allow responsible individuals familiar with the instructions to operate the machine. Know controls and how to stop the machine quickly.
- Do not put hands or feet under cutting deck or near rotating parts.
- Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown by the blade. A small object may have been overlooked and could be accidentally thrown by the mower in any direction and cause injury to you or a bystander. To help avoid a thrown objects injury, keep children, bystanders and helpers at least 75 feet from the mower while it is in operation. Always wear safety glasses or safety goggles during operation or while performing an adjustment or repair, to protect eyes from foreign objects. Stop the blade(s) when crossing gravel drives, walks or roads.
- Be sure the area is clear of other people before mowing. Stop machine if anyone enters the area.
- Never carry passengers.
- Disengage blade(s) before shifting into reverse and backing up. Always look down and behind before and while backing.
- Be aware of the mower and attachment discharge direction and do not point it at anyone. Do not operate the mower without either the entire grass catcher or the chute guard in place.
- Slow down before turning. Operate the machine smoothly. Avoid erratic operation and excessive speed.

- Never leave a running machine unattended. Always turn off blade(s), place transmission in neutral, set park brake, stop engine and remove key before dismounting.
- Turn off blade(s) when not mowing.
- Stop engine and wait until blade(s) comes to a complete stop before (a) removing grass catcher or unclogging chute, or (b) making any repairs, adjusting or removing any grass or debris.
- Mow only in daylight or good artificial light.
- Do not operate the machine while under the influence of alcohol or drugs.
- Watch for traffic when operating near or crossing roadways.
- Use extra care when loading or unloading the machine into a trailer or truck. This unit should not be driven up or down a ramp onto a trailer or truck under power, because the unit could tip over, causing serious personal injury. The unit must be pushed manually on a ramp to load or unload properly.
- Never make a cutting height adjustment while engine is running if operator must dismount to do so.
- Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts. Do not wear loose fitting clothes or jewelry. They can be caught in moving parts. Never operate a unit in bare feet, sandals, or sneakers.
- Check overhead clearance carefully before driving under power lines, wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
- Disengage all attachment clutches, thoroughly depress the brake pedal, and shift into neutral before attempting to start engine.
- Your mower is designed to cut normal residential grass of a height no more than 10". Do not attempt to mow through unusually tall, dry grass (e.g., pasture) or piles of dry leaves. Debris may build up on the mower deck or contact the engine exhaust presenting a potential fire hazard.
- Use only accessories approved for this machine by the manufacturer. Read, understand and follow all instructions provided with the approved accessory.

2. SLOPE OPERATION

Slopes are a major factor related to loss of control and tip-over accidents which can result in severe injury or death. All slopes require extra caution. If you cannot back up the slope or if you feel uneasy on it, do not mow it. For your safety, use the slope gauge included as part of this manual to measure slopes before operating this unit on a sloped or hilly area. If the slope is greater than 15° as shown on the slope gauge, do not operate this unit on that area or serious injury could result.

DO:

- Mow up and down slopes, not across. Use extreme caution when changing directions on slopes.
- Remove obstacles such as rocks, limbs, etc.
- Watch for holes, ruts or bumps. Uneven terrain could overturn the machine. Tall grass can hide obstacles.
- Use slow speed. Choose a low enough gear so that you will not have to stop or shift while on the slope. Always keep machine in gear when going down slopes to take advantage of engine braking action.
- Keep all movement on the slopes slow and gradual. Do not make sudden changes in speed or direction. Rapid engagement or braking could cause the front of the machine to lift and rapidly flip over backwards which could cause serious injury.

- Avoid starting or stopping on a slope. If tires lose traction, disengage the blade(s) and proceed slowly straight down the slope.
- Follow the manufacturers recommendations for wheel weights or counterweights to improve stability.
- Use extra care with grass catchers or other attachments. These can change the stability of the machine.

DO NOT:

- Do not turn on slopes unless necessary; then, turn slowly and gradually downhill, if possible.
- Do not mow near drop-offs, ditches or embankments. The mower could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.
- Do not mow on wet grass. Reduced traction could cause sliding.
- Do not try to stabilize the machine by putting your foot on the ground.
- Do not use grass catcher on steep slopes.
- Do not tow heavy pull behind attachments on slopes greater than 5 degrees. When going downhill the added weight may cause you to lose control and possibly overturn the tractor

3. CHILDREN

- Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the mowing activity. Never assume that children will remain where you last saw them.
- Keep children out of the mowing area and in watchful care of an adult other than the operator.
- Be alert and turn machine off if children enter the area.
- To avoid back-over accidents, always disengage the cutting blades before shifting in reverse. The "Reverse Caution Mode" should not be used when children or others are around.
- Before and when backing, look behind and down for small children.
- Never carry children, even with the blades off. They may fall off and be seriously injured or interfere with the safe machine operation.
- Never allow children under 14 years old to operate the machine. Children 14 years and over should only operate machine under close parental supervision and proper instruction.
- Use extra care when approaching blind corners, shrubs, trees or other objects that may obscure your vision of a child or other hazard.
- Keep children away from hot or running engines. They can suffer burns from a hot muffler.
- Remove key when machine is unattended to prevent unauthorized operation.

4. SERVICE

- Use extreme care in handling gasoline and other fuels. They are extremely flammable and the vapors are explosive.
- Use only an approved container.
- Never remove fuel cap or add fuel with the engine running. Allow engine to cool at least two minutes before refueling.
- Replace fuel cap securely and wipe off any spilled fuel before starting the engine as it may cause a fire or explosion.
- Extinguish all cigarettes, cigars, pipes and other sources of ignition.
- Never refuel the machine indoors because fuel vapors will accumulate in the area.
- Never store the fuel container or machine inside where there is an open flame or spark, such as a gas hot water heater, space heater or furnace.
- Never run a machine inside a closed area.

- To reduce fire hazard, keep the machine free of grass, leaves or other debris build-up. Clean up oil or fuel spillage. Allow machine to cool at least 5 minutes before storing.
- Before cleaning, repairing or inspecting, make certain the blade and all moving parts have stopped. Disconnect the spark plug wire, and keep the wire away from the spark plug to prevent accidental starting.
- Check the blade and engine mounting bolts at frequent intervals for proper tightness. Also, visually inspect blade for damage (e.g., excessive wear, bent, cracked). Replace with blade which meets original equipment specifications.
- Keep all nuts, bolts and screws tight to be sure the equipment is in safe working condition.
- Never tamper with safety devices. Check their proper operation regularly. Use all guards as instructed in this manual.
- After striking a foreign object, stop the engine, remove the wire from the spark plug and thoroughly inspect the mower for any damage. Repair the damage before restarting and operating the mower.
- Grass catcher components are subject to wear, damage and deterioration, which could expose moving parts or allow objects to be thrown. For your safety protection, frequently check components and replace with manufacturer's recommended parts when necessary.
- Mower blades are sharp and can cut. Wrap the blade(s) or wear gloves and use extra caution when servicing blade(s).
- Check brake operation frequently. Adjust and service as required.
- Muffler, engine and belt guards become hot during operation and can cause a burn. Allow to cool down before touching.
- Do not change the engine governor settings or overspeed the engine. Excessive engine speeds are dangerous.
- Observe proper disposal laws and regulations. Improper disposal of fluids and materials can harm the environment and the ecology.
- Prior to disposal, determine the proper method to dispose of waste from your local Environmental Protection Agency. Recycling centers are established to properly dispose of materials in an environmentally safe fashion.
- Use proper containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them. Properly dispose of the containers immediately following the draining of fluids.
- DO NOT pour oil or other fluids into the ground, down a drain or into a stream, pond, lake or other body of water. Observe Environmental Protection Agency regulations when disposing of oil, fuel, coolant, brake fluid, filters, batteries, tires and other harmful waste.
- With the exception of utilizing the deck wash feature on the mower decks, we do not recommend the use of a pressure washer or garden hose to clean your tractor. Water may cause damage to electrical components; pulleys; bearings; or the engine.

WARNING - YOUR RESPONSIBILITY: Restrict the use of this power machine to persons who read, understand and follow the warnings and instructions in this manual and on the machine.

SECTION 3: CALLING SERVICE INFORMATION

The engine manufacturer is responsible for all engine-related issues with regards to performance, power-rating, and specifications.

If you have difficulties with the unit, have any question regarding the operation or maintenance of this equipment, or desire additional information not found in this manual, contact your dealer. If you need help locating a dealer in your area, contact the Customer Dealer Referral Line by calling:

1-877-282-8684

Or you may contact Cub Cadet via the internet by logging on to our Wed Site at:

www.cubcadet.com

Before calling your local dealer, make sure that you have your model and serial numbers ready.

SECTION 4: FINDING YOUR MODEL & SERIAL NUMBER

This Operator's Manual is an important part of your new tractor. It will help you prepare, maintain and safely operate your tractor. Please read and understand what it says.

Before you prepare your tractor for its first use, please locate the tractor and engine model plates and copy the information from them into the spaces provided below. The information on the model plates is very important if you need help from your dealer or the Cub Cadet customer support department. Refer to Figure 1.

- The tractor model plate is located on the right frame rail behind the right front tire.
- The engine identification numbers appear on a decal (or decals) affixed to the engine shrouding.

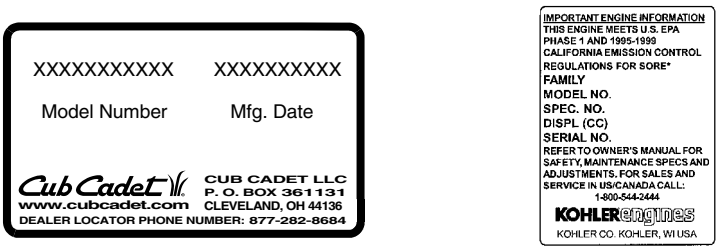


Figure 1

Model Number _____ Mfg. Date (Serial No.) _____

Engine Model No. _____ Engine Spec. No. _____ Engine Serial No. _____

SECTION 5: SAFETY LABELS FOUND ON YOUR UNIT

DECK HEIGHT ADJUSTMENT
(360°Turn Equals 1/2" Adjustment)
1. RAISE DECK LIFT LEVER UNTIL THE NUMBER 6 APPEARS IN WINDOW.
POSITION INDICATOR
2. TURN KNOB COUNTER CLOCKWISE TO LOWER DECKSTOP.
3. TURN KNOB CLOCKWISE TO RAISE DECKSTOP.
4. LOWER DECK LIFT LEVER UNTIL POSITION INDICATOR STOPS.
5. REPEAT PROCESS IF NECESSARY.

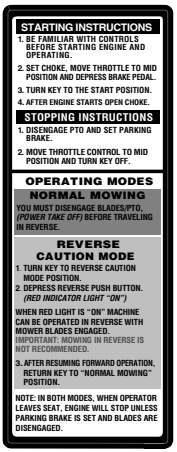
Running Board - Left

WARNING
TO ENSURE SAFE AND PROPER OPERATION OF TRANSMISSION, ONLY USE CUB CADET DRIVE SYSTEM FLUID PLUS.
737-3120 - 1 QUART
737-3121 - 1 GALLON
READ OPERATOR'S MANUAL

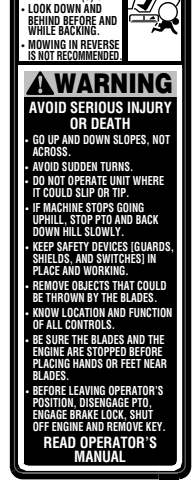
Rear Drawbar

Hood Hinge Bracket

Front Grille


STARTING INSTRUCTIONS
1. BE FAMILIAR WITH CONTROLS BEFORE STARTING ENGINE AND OPERATING.
2. SET CHOKE, MOVE THROTTLE TO MID POSITION AND DEPRESS BRAKE PEDAL.
3. TURN KEY TO THE START POSITION.
4. AFTER ENGINE STARTS OPEN CHOKE.
STOPPING INSTRUCTIONS
1. DISENGAGE PTO AND SET PARKING BRAKE.
2. MOVE THROTTLE CONTROL TO MID POSITION AND TURN KEY OFF.
OPERATING MODES
NORMAL MOWING
YOU MUST DISENGAGE BLADES/PTO, (POWER TAKE OFF) BEFORE TRAVELING IN REVERSE.
REVERSE CAUTION MODE
1. TURN KEY TO REVERSE CAUTION MODE POSITION.
2. DEPRESS REVERSE PUSH BUTTON. (RED INDICATOR LIGHT "ON")
WHEN RED LIGHT IS "ON" MACHINE CAN BE OPERATED IN REVERSE WITH MOWER BLADES ENGAGED.
IMPORTANT: MOWING IN REVERSE IS NOT RECOMMENDED.
3. AFTER RESUMING FORWARD OPERATION, RETURN KEY TO "NORMAL MOWING" POSITION.
NOTE: IN BOTH MODES, WHEN OPERATOR LEAVES SEAT, ENGINE WILL STOP UNLESS PARKING BRAKE IS SET AND BLADES ARE DISENGAGED.

Running Board - Center


DANGER
ROTATING BLADES CAUSE SERIOUS INJURY OR DEATH
• DO NOT MOW WHEN CHILDREN OF OTHERS ARE AROUND.
• NEVER CARRY CHILDREN EVEN WITH BLADE(S) OFF.
• LOOK DOWN AND BEHIND BEFORE AND WHILE BACKING.
• MOWING IN REVERSE IS NOT RECOMMENDED.
WARNING
AVOID SERIOUS INJURY OR DEATH
• GO UP AND DOWN SLOPES, NOT ACROSS.
• AVOID SUDDEN TURNS.
• DO NOT OPERATE UNIT WHERE IT COULD SLIP OR TIP.
• IF MACHINE STOPS GOING UPHILL, STOP PTO AND BACK DOWN HILL SLOWLY.
• KEEP SAFETY DEVICES [GUARDS, SHIELDS, AND SWITCHES] IN PLACE AND WORKING.
• REMOVE OBJECTS THAT COULD BE THROWN BY THE BLADES.
• KNOW LOCATION AND FUNCTION OF ALL CONTROLS.
• BE SURE THE BLADES AND THE ENGINE ARE STOPPED BEFORE PLACING HANDS OR FEET NEAR BLADES.
• BEFORE LEAVING OPERATOR'S POSITION, DISENGAGE PTO, ENGAGE BRAKE LOCK, SHUT OFF ENGINE AND REMOVE KEY.
READ OPERATOR'S MANUAL

Running Board - Right

Key Switch/Module - Dash Panel

Figure 2

SECTION 6: CONTROLS and FEATURES

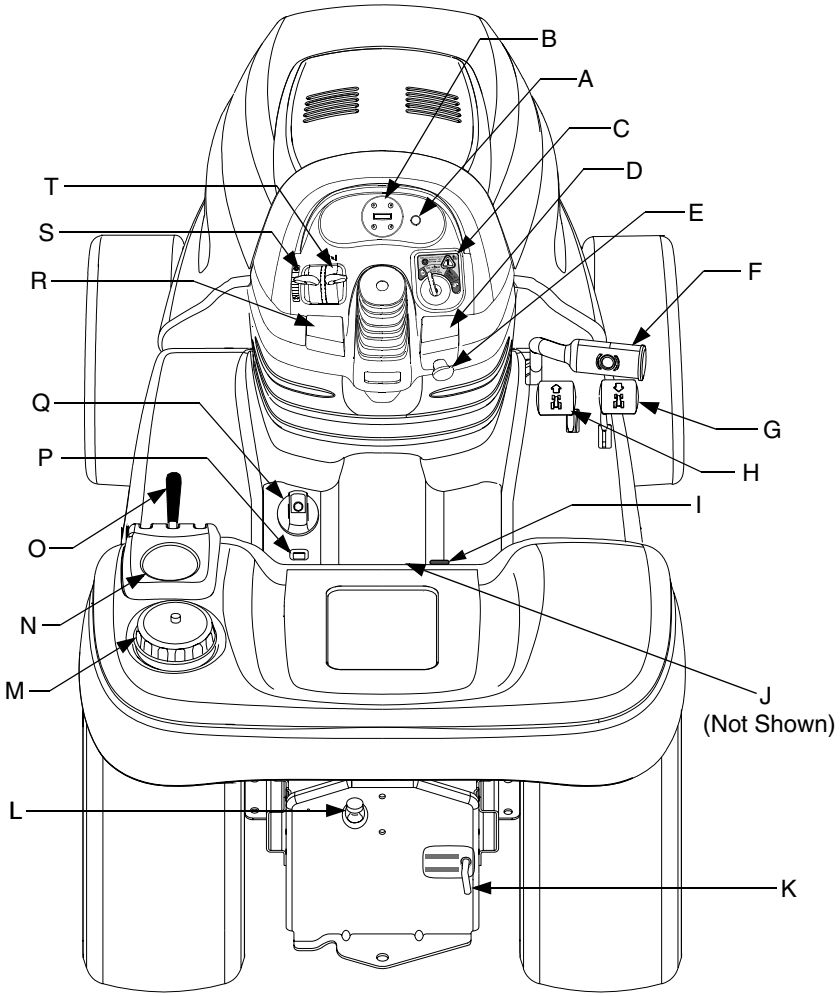


Figure 3

A	Low Fuel Indicator Lamp	K	Transmission Release Rod
B	Indicator Panel/Hour Meter	L	Transmission Oil Fill/Dipstick
C	Key Switch Module	M	Fuel Fill Cap
D	Parking Brake Lever	N	Cup Holder
E	PTO Switch	O	Hydraulic Lift Lever
F	Brake Pedal	P	Center Height Position Indicator
G	Reverse Pedal	Q	Deck Height Adjustment Knob
H	Forward Pedal	R	Cruise Control Lever
I	12V Power Outlet	S	Throttle Lever
J	Seat Adjustment Lever (Not Shown)	T	Choke Lever

* Steering Wheel and Seat Removed For Clarity

NOTE: *References to LEFT and RIGHT indicate that side of the tractor when facing forward while seated in the drivers seat. Reference to FRONT indicates the grille end of the tractor; to REAR, the drawbar end.*

Steering Wheel
The steering wheel, centered on the dash panel, is used to turn the tractor *left* or *right* while driving.

NOTE: *This tractor is equipped with hydraulic power steering. With this feature, the center of the steering wheel may not stay center aligned.*

A. Low Fuel Indicator Lamp
The Low Fuel indicator lamp is on the dash panel. This indicator will illuminate when the tractor is low on fuel.

B. Indicator Panel/Hour Meter
The indicator panel/hour meter uses indicator lights to display the status of various functions of the tractor and also records the accumulated hours of operation. Refer to Figure 4.

Indicator Panel Features (See Figure 4)

Battery Indicator
- Illuminates and the battery voltage is displayed briefly when the ignition switch it turned to an on position.
- Illuminates to indicate the battery voltage has dropped below 11.5 (+0.5/-1.0) DC volts. The battery voltage is also displayed on the hour meter. If this indicator and display come on during operation, check the battery and charging system for possible causes and/or contact your Cub Cadet dealer.

Oil Pressure Indicator
- This warning lamp indicates low engine oil pressure. If this indicator illuminates, stop the tractor immediately and check the engine oil level. If the oil level is within the operating range, but the light remains on, contact your *Cub Cadet* dealer. **NOTE:** *The oil pressure indicator may illuminate when the key switch is turned to an on position, but should turn off when the engine is started.*

PTO Engaged Indicator
- This indicator illuminates when the key switch is turned to the "START" position while the PTO switch is pulled upward in the "ENGAGED" position. Check this indicator if the engine will not crank with the key switch in the "START" position. If necessary, move the PTO switch to the "DISENGAGED" position.

Brake Engaged Indicator
- This indicator illuminates when the key switch is turned to the "START" position and the brake pedal is not fully depressed. Check this indicator if the engine will not crank with the key switch in the "START" position. If necessary, fully depress the brake pedal.

Hour Meter/Battery Display
The hour meter shows the hours (tenths of an hour - *right* most digit) that the tractor has been operated.

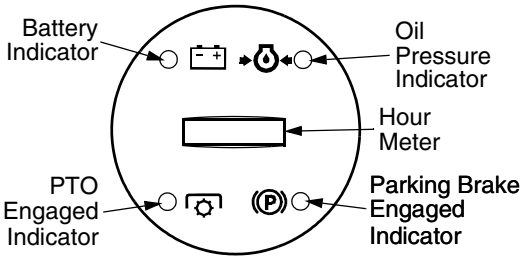


Figure 4

- The hour meter is activated when the key switch is turned to either the “NORMAL MOWING” or the "REVERSE CAUTION MODE" switch positions. A record of the actual hours of operation should be kept to assure maintenance procedures are completed according to the schedule in this manual.
- When the key switch is turned to the on position, the battery indicator light briefly illuminates and the battery voltage is briefly displayed. The display then changes to the accumulated hours.

C. Key Switch Module

The key switch module consist of a four position key switch, the “Reverse Push Button”, and a red indicator light. Refer to Figure 5.

The four key positions of key switch module (Refer to Figure 5) and their functions are as follows:

- ***Stop*** — Stops the tractor engine and shuts down the tractor’s electrical circuits.
- ***Reverse Caution Mode*** — This position allows the machine to be operated in reverse with the blades (PTO) engaged.
- ***Normal Mowing*** — The normal operating position. All safety interlock circuits are activated and the blades (PTO) will disengage when the tractor is driven in the reverse direction.
- ***Start*** — Energizes the starter motor to crank and start the tractor engine. Release the key as soon as the engine starts and the key will return to “NORMAL MOWING” position.

To prevent accidental starting and/or battery discharge, remove the key from the key switch when the tractor is not in use.

Reverse Push Button — The orange/triangular button at the top/right corner of the key switch module activates the system which allows the tractor’s blades (PTO) to remain engaged when the tractor is driven in the reverse direction. The key must be turned to the “REVERSE CAUTION MODE” and the operator must be in the tractor seat prior to depressing the button to activate the system.

The **Red Indicator Light** at the top/left corner of the key switch module comes “ON” to alert the operator that the key has been turned to the “Reverse Caution Mode” position, the “Reverse Push Button” has been depressed, and that the blades will remain engaged when the machine is driven in reverse.

IMPORTANT: *Mowing in reverse is not recommended*.

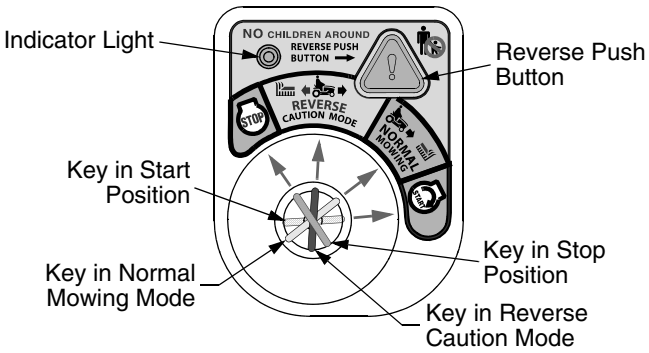


Figure 5

D. Parking Brake Lever

Figure 6

The parking brake lever is located to the right of the steering wheel in the dash panel. With the brake pedal depressed fully, push the parking brake lever downward and release the brake pedal to lock the parking brake.

E. PTO Switch

The PTO switch is located on the lower/right side the dash panel. Pull the knob outward to engage the PTO clutch. Push the knob inward to disengage the PTO clutch.

F. Brake Pedal

Figure 7

The brake pedal is located at the front of the right running board above the forward and reverse pedals. Depress to stop the tractor and disengage the cruise control. Fully depress the brake pedal to activate the safety interlock switch when starting the tractor.

G. Reverse Pedal

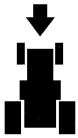


Figure 8

WARNING: Always look down and behind before and while backing. Do not operate the tractor when children or others are around. Stop the tractor immediately if someone enters the area.

The reverse control pedal is located on the right running board below the brake pedal. Press the pedal down to move in reverse.

H. Forward Pedal

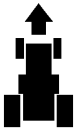


Figure 9

The forward control pedal is located on the right running board below the brake pedal. Slowly press down on the pedal to start moving forward. The forward ground speed of the tractor is directly affected by the distance the pedal is depressed.

I. 12V Power Outlet

The 12V power outlet is located on the front/right surface of the fender, below the seat. It is used for the convenience of plugging in accessories that require a power source with a maximum load of 5 amps at 12 volts.

J. Seat Adjustment Lever

The seat adjustment lever is located below the seat. This lever is used to adjust the seat forward or backward.

K. Transmission Release Rod

The transmission release rod is located at the back of the tractor in the draw bar. This rod, when engaged, allows the tractor to be pushed short distances by hand.

To disengage the transmission, pull back on the rod until its locking flange is visible outside the drawbar, then lower the rod into the slot and release. To reengage the transmission, pull back on the rod, lift out of the slot and release.

L. Transmission Oil Fill/Dipstick
The transmission oil fill/dipstick is located at the back of the tractor in the rear draw bar. The handle of the transmission oil dipstick serves as the fill tube plug and should fit snugly in the fill tube.

M. Fuel Fill Cap
The fuel fill cap is located on the fender to the left of the seat.

N. Cup Holder
The cup holder is located on the fender to the left of the seat.

O. Hydraulic Lift Lever
The hydraulic lift lever is located on the fender to the left of the seat. This lever is used to operate the tractor's center lift system.

P. Center Lift Height Indicator
The center lift height indicator is located in the left running board. This indicator shows the operator the relative height position of the hydraulic center lift system. The lower number indicates a lower setting.

Q. Deck Height Adjustment Knob
The deck height adjustment knob is located on the left running board (See Figure 10). Use this knob to set and hold your desired downstop position for the mower deck.

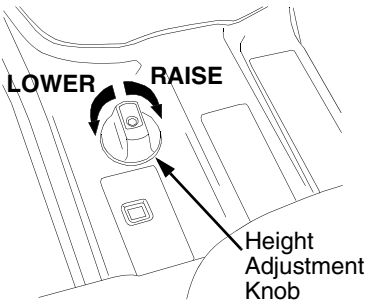


Figure 10

Each full rotation of the adjustment knob equals approximately a 1/4 inch adjustment in the deck height setting, and there are four detent positions per rotation.

Always use the tractor lift system to raise the deck before turning the adjustment knob.

R. Cruise Control Lever

Figure 11

The cruise control lever is located to the left of the steering wheel. Push the cruise control lever downward while traveling at the desired forward speed to engage the cruise control.

S. Throttle Lever

This symbol shows the fast position.

This symbol shows the slow position

The throttle lever is located to the left of the steering wheel in the throttle/choke lever pod. When set in a given position, the throttle lever will maintain a uniform engine speed. Push the lever forward to increase the engine speed.

IMPORTANT: *When using power take-off operated equipment, best performance is achieved with the throttle lever in the "FAST" position.*

T. Choke Lever
The choke lever is located to the left of the steering wheel in the throttle/choke lever pod. Push the lever forward to close the engine choke plate.

SECTION 7: OPERATION

Safety Interlock Switches

This tractor is equipped with a safety interlock system for the protection of the operator. If the interlock system should ever malfunction, do not operate the tractor. Contact your authorized *Cub Cadet* Dealer. The safety interlock system prevents the engine from cranking or starting unless the brake pedal is fully depressed, and the PTO is "OFF".

- The safety interlock system will automatically shut off the engine if the operator leaves the seat before engaging the brake lock.
- The safety interlock system will automatically shut off the engine if the operator leaves the seat with the PTO "ON", regardless of whether the brake lock is engaged. The PTO switch must be "OFF" to restart the engine.
- **With key switch in "NORMAL MOWING" position:** The safety interlock system will automatically shut off the PTO if the *reverse control pedal* is depressed with the PTO "ON". To re-engage the PTO, release the reverse control pedal, push the PTO switch inward to the "OFF" position, then pull the PTO switch outward to engage the PTO.

Fueling The Tractor

NOTE: *Some fuels, called oxygenated or reformulated gasolines, are gasoline blended with alcohols or ethers. Gasolines blended with either ethyl alcohol (Max. 10%) or methyl tertiary butyl ether (MTBE, Max. 15%) are approved as fuels for this engine. If any undesirable operating symptoms occur, use gasoline with a lower percentage of these blends.* ***Do not*** *use gasoline which contains Methanol or other alcohol blends. For best results use only clean, fresh,* ***unleaded*** *gasoline with an octane rating of 87 or higher. Purchase fuel in a quantity that can be used within 30 days to assure fuel freshness. Do not use gasoline left over from the previous season to minimize gum deposits in the fuel system. Leaded gasoline is NOT RECOMMENDED and must not be used where exhaust emissions are regulated.*

Do not fill the fuel tank when the engine is running or while the engine is hot. Tighten the fuel cap securely.

Unscrew the fuel cap and fill the fuel tank from an approved gasoline container.

Starting The Engine

- Operator must be sitting in the tractor seat.
- Push choke lever to the full choke position. Less choking may be necessary due to variations in temperature, grade of fuel, etc. Little or no choking will be needed when the engine is warm.
- Place the throttle midway between the “SLOW” and “FAST” position.
- Make sure the PTO switch is in the “OFF” position.
- Fully depress the brake pedal.
- Turn the ignition key clockwise to the “START” position and release it as soon as the engine starts; however, do not crank the engine continuously for more than 10 seconds at a time. If the engine does not start within this time, turn the key to “STOP” and wait a minute to allow the engine’s starter motor to cool. Try again after waiting.
- After the engine starts, slowly release the brake pedal. As the engine warms up, gradually pull the choke lever all the way back. Do not use the choke to enrich the fuel mixture, except when necessary to start the engine.

Stopping The Engine

NOTE: *Remove the key from the ignition switch to prevent accidental starting or battery discharge if the equipment is left unattended.*

- Place the PTO switch in the “OFF” position. Place the throttle control lever between the “MID” and “FAST” positions. Then turn the ignition key to the “STOP” position and remove the key from the ignition switch.

Driving The Tractor

WARNING: Avoid sudden starts, excessive speed and sudden stops.

WARNING: Do not leave the seat of the tractor without disengaging the PTO and engaging the parking brake. If leaving the tractor unattended, turn the ignition key off and remove key.

- Depress the brake pedal to release the parking brake and let the pedal up. Move the throttle lever to the position where the engine operates best for the load to be handled (normally full throttle).

NOTE: *Do not use the forward or reverse control pedals to change the direction of travel when the tractor is in motion. Use the brake pedal to bring the tractor to a stop before depressing either the forward or reverse control pedal.*

- To move forward, slowly depress the forward control pedal until the desired speed is achieved.
- To move in reverse, check that the area behind is clear then slowly depress the reverse control pedal. Always look down and behind before and while backing up.

Setting The Cruise Control

NOTE: *The cruise control feature can only be operated in the forward direction.*

- Slowly depress the forward control pedal until the desired speed is achieved.
- Lightly push the cruise control lever downward.
- While continuing to hold the cruise lever down, lift your foot from the forward control pedal (you should feel the cruise latch engage).

- If properly engaged, the cruise lever and forward control pedal should lock in the down position, and the tractor will maintain the same forward speed.
- Disengage the cruise control using one of the following methods:
  - Depress the brake pedal to disengage the cruise control and stop the tractor.
  - Lightly depress the forward control pedal.
  - Lift the cruise control lever upward.

NOTE: *Although not recommended, depressing the reverse pedal will also disengage the cruise control.*

To change to the reverse direction when operating with cruise control, depress the brake pedal to disengage the cruise control and stop the tractor; then depress the reverse control pedal.

Driving On Slopes

Refer to the SLOPE GAUGE on page 41 to help determine slopes where you may not operate safely.

WARNING: Do not mow on inclines with a slope in excess of 15 degrees (a rise of approximately 2-1/2 feet every 10 feet). The tractor could overturn and cause serious injury.

Operate the tractor up and down slopes, never across slopes. Do not drive so that the tractor may tip over sideways

Before operating the tractor on a slope, walk the slope to look for possible hazards such as rocks, mounds, stumps, or surface irregularities which could cause the tractor to be upset.

Back the tractor with attachment up the steepest portion of each slope you intend to work. If the tractor cannot negotiate the slope in reverse, the slope is too steep to be worked.

Avoid turns when driving on a slope. If a turn must be made, turn down the slope. Turning up a slope greatly increases the chance of a roll over.

Avoid stopping when driving up a slope. If it is necessary to stop while driving up a slope, start up smoothly and carefully to reduce the possibility of flipping the tractor over backward.

Stopping The Tractor

Fully depress the brake pedal to bring the tractor to a complete stop, engage the parking brake, disengage the PTO, turn the ignition switch to “STOP”” and remove the key from the switch before dismounting.

Using the Hydraulic Lift System

To raise an attachment using the hydraulic lift system, the engine must be running. Generally, an attachment can be lowered with the engine running or off. Push the hydraulic lift lever forward to lower an attachment or pull the hydraulic lift lever back to raise an attachment.

Opening Tool Box

A convenient tool box and manual pouch is located under the seat. To access this area, pivot the seat forward.

Engaging The PTO

- Move throttle control lever to approximately the mid throttle position.
- Pull the PTO switch to the “RUN” position.
- Advance the throttle lever to the operating speed (full engine speed).
- The operator must remain in the tractor seat at all times. If the operator should leave the seat without turning off the PTO switch, the tractor’s engine will shut off.
- **With key switch in “NORMAL MOWING” position ONLY:** The PTO clutch cannot be operated when the tractor is driven in the reverse direction. In the “NORMAL MOWING” position, the PTO clutch will automatically disengage when the reverse pedal is depressed. To re-engage the PTO clutch, release the reverse control pedal, move the PTO switch to the “OFF” position, then again pull the switch to the “RUN” position.

Using the REVERSE CAUTION MODE key position

The **REVERSE CAUTION MODE** position of the key switch module allows the machine to be operated in reverse with the blades (PTO) engaged.

IMPORTANT: *Mowing in reverse is not recommended*.

Use extreme caution while operating the tractor in the "Reverse Caution Mode". Always look down and behind before and while backing. Do not operate the tractor when children or others are around. Stop the tractor immediately if someone enters the area.

To use the **REVERSE CAUTION MODE** proceed as follows:

IMPORTANT: *The operator MUST be seated in the tractor seat.*

1. Start the engine as previously instructed in this Operator's Manual.
2. Turn the key from the **NORMAL MOWING** (Green) position to the **REVERSE CAUTION MODE** (Yellow) position of the key switch module. Refer to Figure 12.
3. Depress the **REVERSE PUSH BUTTON** (Orange/Triangular Button) at the top/right corner of the key switch module. The red indicator light at the top/left corner of the key switch module will be "ON" while activated. Refer to Figure 12.
4. Once activated (indicator light "ON"), the tractor can be driven in reverse with the cutting blades (PTO) engaged.
5. Always look down and behind before and while backing to make sure no children are around.
6. After resuming forward motion, return the key to the **NORMAL MOWING** position.

IMPORTANT: *The* **REVERSE CAUTION MODE** *will remain activated until:*

- *The key switch is turned to either the* **NORMAL MOWING** *or* **STOP** *position*.
- The operator leaves the seat. Follow the previous instructions to re-activate.

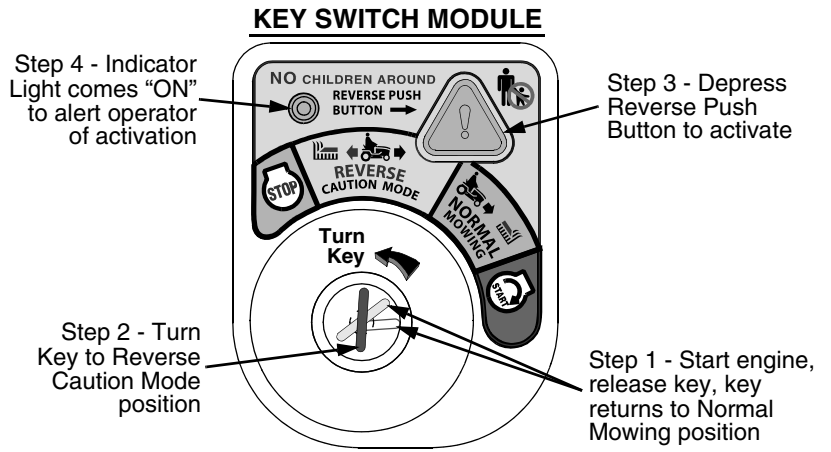

KEY SWITCH MODULE
Step 4 - Indicator Light comes "ON" to alert operator of activation
NO CHILDREN AROUND
REVERSE PUSH BUTTON
Step 3 - Depress Reverse Push Button to activate
STOP
REVERSE CAUTION MODE
NORMAL MOWING
START
Turn Key
Step 2 - Turn Key to Reverse Caution Mode position
Step 1 - Start engine, release key, key returns to Normal Mowing position

Figure 12

Using The Drawbar

Drawbar equipment must be hitched to the tractor only at the hitch hole. See Figure 13.

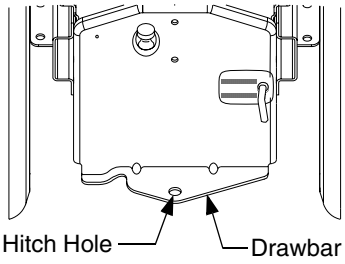


Figure 13

Mowing

WARNING: To avoid possible injury, never direct the discharge of material toward bystanders or allow anyone near the machine while in operation. Although the area has been supposedly cleared of foreign objects, small objects may be picked up and discharged by the mower.

IMPORTANT: *Do not engage the mower deck when lowered in grass. Premature wear and possible failure of the 'V" belts and PTO clutch will result. Fully raise the deck or move to a non grassy area before engaging the mower deck.*

This tractor can be equipped with one of Cub Cadet's high quality mowing decks. The following information will be helpful when using a Cub Cadet mowing deck with your tractor.

For best results it is recommended that the first two laps be cut with the discharge thrown towards the center. After the first two laps, reverse the direction to throw the discharge to the outside for the balance of cutting. This will give a better appearance to the lawn.

Do not cut the grass too short, as the mower will tend to scalp the grass. Short grass invites weed growth and yellows quickly in dry weather.

Mowing should be done with the engine at full throttle. Do not mow at high ground speed.

During certain times of the year and under some conditions, the mower may leave streaks of uncut grass.

Streaking may occur when attempting to mow heavy weeds and tall grass. Under these conditions it may be necessary to go back over the cut area a second time to get a clean cut.

The following practices will help eliminate streaking:

- Mow the area more often so the grass doesn't get too tall and heavy.
- Operate the tractor at full throttle and slower forward speeds.
- Keep the blades sharp and replace the blades when worn.

SECTION 8: ADJUSTMENTS

Seat Adjustment

WARNING: Do not adjust the seat when the tractor is moving, as this could cause the operator to lose control of the tractor.

For the comfort of the operator, the tractor is equipped with an easy to operate adjustable seat. There are also three seat mounting positions to provide additional adjustment.

To adjust the seat forward or back, slide the seat adjustment lever to the left; reposition the seat to your most comfortable position; and release the seat adjustment lever. See Figure 14.

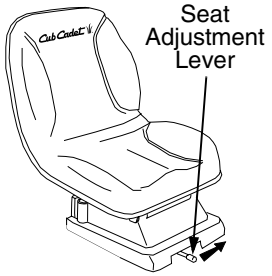


Figure 14

If additional adjustment is desired, flip the seat forward, remove the four screws fastening the seat, and re-mount the seat on the hinge brackets as follows (See Figure 15):

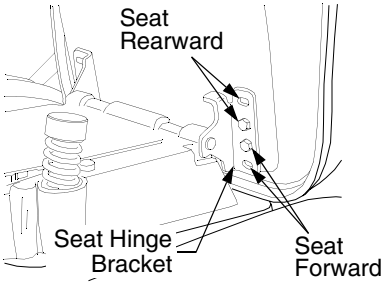


Figure 15

- Seat forward-use front two holes.
- Seat middle-use middle two holes.
- Seat rearward-use rear two holes

Front Wheel Alignment

Note: *The left-hand ball joint is left-hand threaded.*

The front wheels should toe-in approximately 1/8 inch. Measure distances A and B. A should be approximately 1/8 inch less than B. See Figure 16.

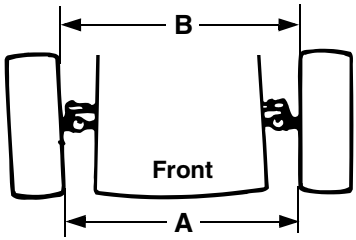


Figure 16

To adjust toe-in, loosen left and right ball joint jam nuts. See Figure 17.

Turn the tie rod in or out of the ball joints as required to attain proper adjustment. Tighten the jam nuts against the ball joints.

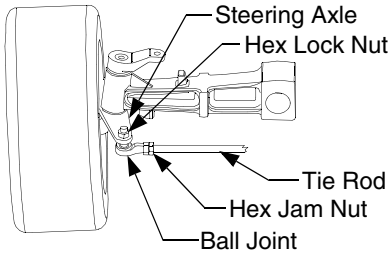


Figure 17

Brake Inspection and Adjustment

During normal operation, the tractor brake is subject to minimal wear. However, the brake should be periodically tested, and adjusted if necessary.

Checking the Brake.

Place the tractor on a firm and level surface. Stop the engine and remove the ignition key.

Pull and lock the transmission release rod in the "*Transmission Released*" position. Perform the following checks: *NOTE: The tractor may be difficult to push because of the hydro transmission's braking action.*

- Engage the parking brake. If the tractor can be pushed forward or rearward, the braking force must be increased.
- Release the Parking Brake Lever. If the tractor cannot be pushed forward or rearward, the braking force must be decreased.

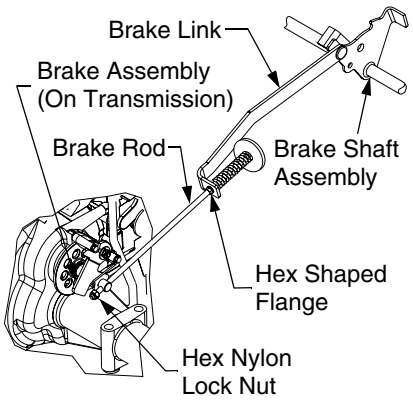
Adjusting the Brake.

Remove the rear drawbar from the frame by removing the four hex tapp screws. *NOTE: The oil fill tube/dipstick will be pulled from the transmission housing. Plug or cover the hole in the transmission to prevent dirt or debris from entering.*

From beneath the right/rear side of the tractor frame, secure the hex shaped flange of the brake rod (located just behind the brake link) to prevent the rod from turning (Refer to Figure 18).

From just above the *right* axle carrier, inside the *right* frame rail, slowly turn the hex nylon lock nut at the end of the brake rod as follows to adjust the brake (Refer to Figure 18):

- Turn the nylon lock nut clockwise to increase the braking force.
- Turn the nylon lock nut counterclockwise to decrease the braking force.



VIEWED FROM ABOVE - FENDER AND RUNNING BOARD REMOVED

Figure 18

Recheck the brake adjustment to ensure proper operation, and readjust as necessary. If brake adjustment does not correct the problem, see your authorized *Cub Cadet* dealer.

While guiding the transmission release rod through keyhole and the oil fill tube/dipstick into the transmission, position the rear drawbar on the frame. Secure with the four hex tapp screws.

Turning Radius Adjustment

This tractor is equipped with hydraulic power steering which is set at the factory. The turning radius should be equal for both left and right hand turns. If adjustment is necessary please contact your authorized Cub Cadet dealer.

SECTION 9: MAINTENANCE

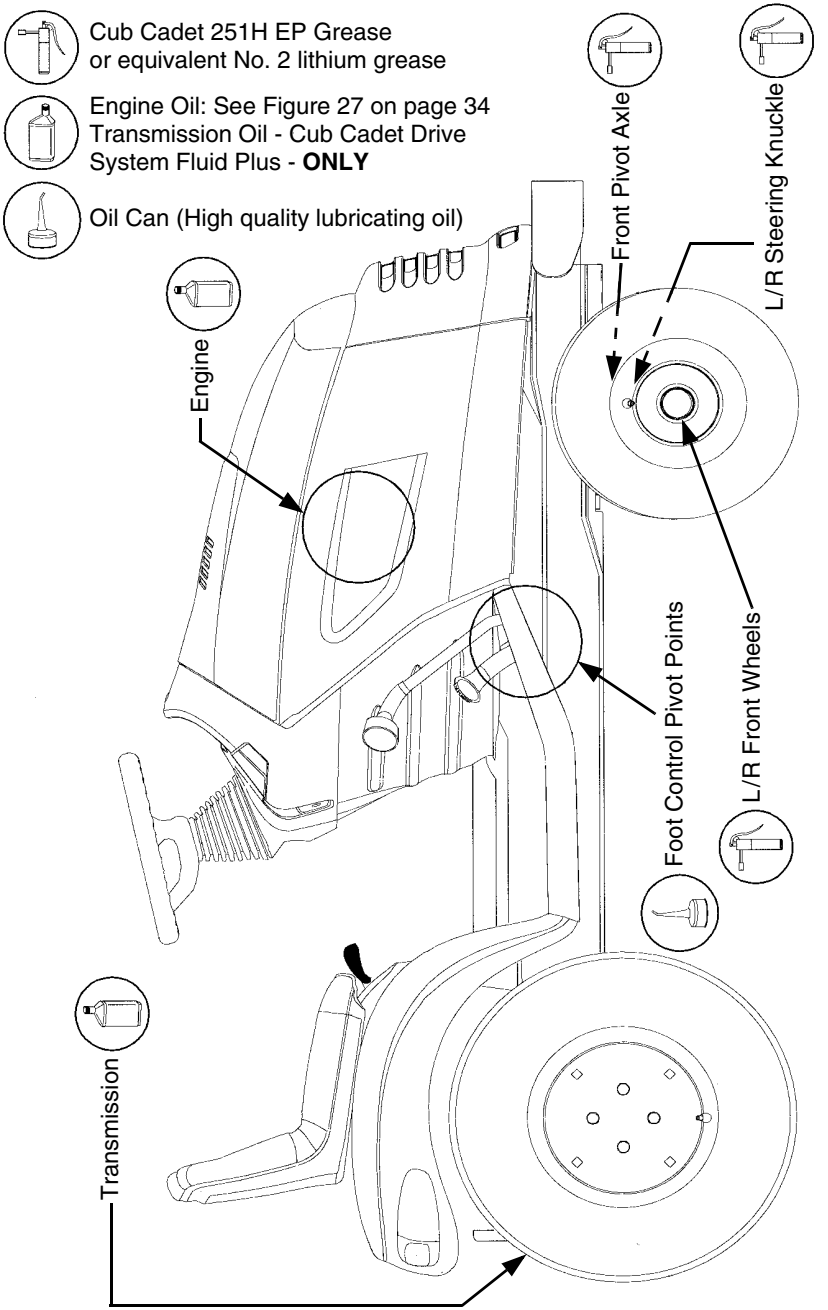
Maintenance Chart

Operation to be performed	Each Use	10 Hours	50 Hours	100 Hours	150 Hours	200 Hours	250 Hours	300 Hours
Grease front wheel bearings		•						
Grease L/R steering knuckles		•						
Grease front pivot axle		•						
Check engine oil level	•							
Change engine oil and filter	‡			•		•		•
Check spark plug condition				•		•		•
Check transmission oil level	•							
Change transmission oil filter				•	•	•	•	•
Change transmission oil					•		•	
Check air cleaner & housing	•							
Clean & re-oil foam air pre-cleaner	††							
Change air cleaner paper cartridge				†		†		†

‡ Change oil and filter after first 5 hours
† More often under dusty conditions
†† Clean every 25 hours or more often under dusty or dirty conditions

NOTE: With the exception of utilizing the deck wash feature on the mower deck, we do not recommend the use of a pressure washer or garden hose to clean your tractor. Water may cause damage to electrical components; spindles; pulleys; bearings; or the engine.

LUBRICATION ILLUSTRATION


Cub Cadet 251H EP Grease
or equivalent No. 2 lithium grease
Engine Oil: See Figure 27 on page 34
Transmission Oil - Cub Cadet Drive
System Fluid Plus - **ONLY**
Oil Can (High quality lubricating oil)
Front Pivot Axle
L/R Steering Knuckle
Engine
Foot Control Pivot Points
L/R Front Wheels
Transmission

Accessing Engine Compartment

The engine compartment can be accessed by raising the hood as follows:

- Lift the hood straight upward at the recessed notches of the side panels to disengage the internal hood latch.
- Carefully pivot the hood forward to open.

To close the hood:

- Carefully pivot the hood rearward to lower.
- Push down on the front of the hood to engage the internal hood latch.

If greater access is required, the tractor is equipped with quick release side panels. Remove the quick release side panels as follows (See Figure 19):

- Open the hood by lifting upward at the side panel notches on each side of the tractor.
- Flip the tab of the two quick release fasteners up and turn to align with the slots in side panels.
- Swing the rear of the side panel out and away from the tractor.
- Slide the side panel rearward to disengage the two front tabs of the side panel from the slots of the grille/side panel mounting strip.

To reinstall the side panels:

- Insert the side panel front tabs into the slots of the grille/side panel mounting strip.
- Swing the rear of the side panel inward and align so that the tabs of the quick release fasteners go through the side panel slots.
- Pull the quick release fastener tabs slightly outward and rotate 1/4 turn (perpendicular to slot) to lock the side panels in place. Flip the fastener tabs down.
- Close the hood.

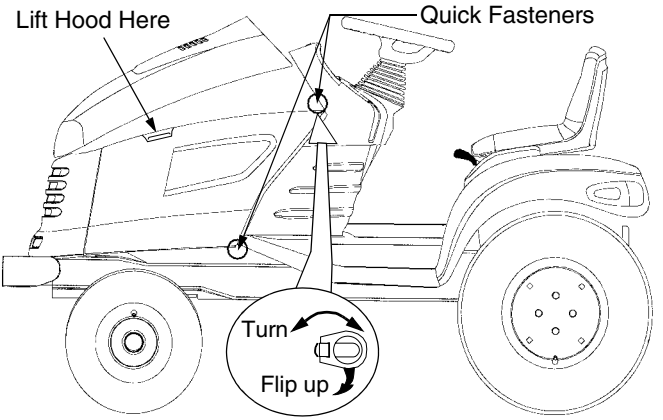


Figure 19

General Battery Information

WARNING

- Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.
- Should battery acid accidentally splatter into the eyes or onto the skin, rinse the affected area immediately with clean cold water. If there is any further discomfort, seek prompt medical attention.
- If acid spills on clothing, first dilute it with clean water, then neutralize

with a solution of ammonia/water or baking soda/water.

- NEVER connect (or disconnect) battery charger clips to the battery while the charger is turned on, as it can cause sparks.
- Keep all sources of ignition (cigarettes, matches, lighters) away from the battery. The hydrogen gas generated during charging can be combustible.
- As a further precaution, only charge the battery in a well ventilated area.
- Always shield eyes and protect skin and clothing when working near batteries.

WARNING: Batteries contain sulfuric acid and may emit explosive gases. Use extreme caution when handling batteries. Keep batteries out of the reach of children.

Battery Removal

WARNING: Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.

The battery is located under the dash panel in the frame pedestal.

To remove the battery:

- Open the tractor hood by lifting it at the notches in the side panels.
- Remove the upper bulkhead baffle from the front of the dash panel by lifting upward on the baffle locking tab on each side.
- Pull the upper end of the rubber battery strap rearward to unhook it from the tab on the pedestal.
- Loosen the negative battery cable clamp, disconnect the negative cable, and move the cable away from the battery. Disconnect the positive lead from the battery in the same manner.
- Carefully lift the battery up and out of the tractor.

Install the battery by repeating the above steps in the reverse order.

IMPORTANT: *Always connect the positive lead to the battery before connecting the negative lead.*

Battery Maintenance

The battery is filled with battery acid and then sealed at the factory. However, even a “maintenance free” battery requires some maintenance to ensure its proper life cycle.

- Spray the terminals and exposed wire with a battery terminal sealer, or coat the terminals with a thin coat of grease or petroleum jelly, to protect against corrosion.
- Always keep the cables and terminals clean and free of corrosion.
- Always keep the terminal covers in place over the battery terminals.
- Avoid tipping. Even a sealed battery will leak electrolyte when tipped.

Battery Storage

- When storing the tractor for extended periods, disconnect the negative battery cable. It is not necessary to remove the battery.
- All batteries discharge during storage. Keep the exterior of the battery clean, especially the top. A dirty battery will discharge more rapidly.
- The battery must be stored with a full charge. A discharged battery can freeze sooner than a charged battery. A fully charged battery will store longer in cold temperatures than hot.
- Recharge the battery before returning to service. Although the tractor may start, the engine charging system may not fully recharge the battery.

Charging the Battery

Test and, if necessary, recharge the battery after the tractor has been stored for a period of time.

- A voltmeter or load tester should read 12.6 volts (DC) or higher across the battery terminals.
- Charge the battery with a 12-volt battery charger at a **MAXIMUM** rate of 10 amps.

Voltmeter Reading	State of Charge	Charging Time
12.7	100%	Full Charge
12.4	75%	90 Min.
12.2	50%	180 Min.
12.0	25%	280 Min.

Headlight Bulb Replacement

Replace headlight bulbs as follows: (See Figure 20)

1. After noting which wire connects to each terminal, unplug the wire harness leads from the headlight socket terminals.
2. Rotate the socket assembly as follows to remove from the reflector housing:

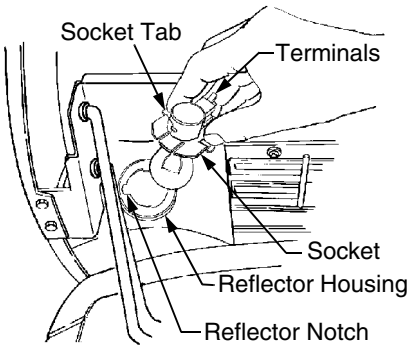


Figure 20

- Left headlight — approximately 1/4 turn counterclockwise.
- Right headlight — approximately 1/4 turn clockwise.

3. Push the bulb inward and turn counterclockwise to remove from the socket.
4. Align the post of the bulb base with the notch in the socket, then push the bulb inward and turn clockwise to lock
5. With the terminals pointing upward, align the tab of the socket with the notch of the reflector. Push the socket inward and turn as follows to lock:
   - Left headlight-1/4 turn clockwise.
   - Right headlight-1/4 turn counter-clockwise.
6. Connect the wire harness leads to the appropriate socket terminals.

Tire Inflation

Keep the tires inflated to the recommended pressure. Improper inflation will affect tire life and operator comfort, and also could affect the level of the mower deck and quality of cut. See the tire side wall for proper inflation range.

Ensure that the valve caps are securely tightened in place to prevent air loss and to protect the valve core.

Do not overload the tractor tires by mounting equipment on the tractor which exceeds the load capacity of the size of the tires on the tractor.

Checking Transmission Oil Level

NOTE: Check the oil level only while the engine is stopped and the tractor is level.

Check the oil level of the transmission case before each use to see that it is filled to the correct level. Before checking the transmission oil level, clean the area around the Transmission Oil Fill/Dipstick to prevent debris from entering the transmission case. Always keep the oil level between the “FULL” and the “ADD” marks on the dipstick. When checking the oil level, the dipstick must be withdrawn and wiped clean,

then fully reinserted before being withdrawn again for a true reading.

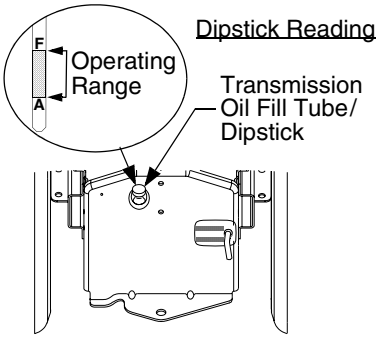


Figure 21

Adding Transmission Oil

WARNING: The fluid for your transmission has been specially formulated to ensure the safe and proper operation of your tractor. Add Cub Cadet Drive System Fluid Plus ONLY. Do not use any other fluid.

WARNING: Never overfill the transmission case. Damage may result if the oil level in the transmission case is below the "ADD" mark or over the "FULL" mark of the dipstick.

For best results, fill to the "FULL" mark on the dipstick as opposed to adding a given quantity of oil. Always check the level on the dipstick before adding more oil. Refer to Figure 21.

Refer to the Lubrication Illustration for information regarding the proper type of oil to add to the transmission case. See the Specifications Chart for the quantity required.

- Place the tractor on a level surface and engage the parking brake. Stop the engine and remove the ignition key.
- Clean the area around the Transmission Oil Fill/Dipstick to prevent debris from entering the transmission case.
- Remove the dipstick from the oil fill tube and SLOWLY pour oil into the oil fill tube. Fill the transmission case until the oil level reaches the "FULL" mark on the dipstick.
- Reinstall the dipstick securely into the oil fill tube.

WARNING: The oil fill plug/ dipstick must be installed securely into the fill tube at all times when the engine is operating.

Changing Transmission Oil

WARNING: The fluid for your transmission has been specially formulated to ensure the safe and proper operation of your tractor. When changing the transmission fluid replace it with Cub Cadet Drive System Fluid Plus ONLY. Failure to use Cub Cadet Drive System Fluid Plus may result in a failure of the drive system which could result in property damage or personal injury. Do not use any other fluid

See to the Maintenance Chart for the frequency of service and the Specifications Chart for the quantity required.

NOTE: *Do not reuse the transmission oil. Contaminated transmission oil can damage the hydro transmission.*

Please dispose of used oil at appropriate recycling centers.

- Place the tractor on a level surface and engage the parking brake. Stop the tractor's engine and remove the ignition key.
- Remove any center attachments.
- Clean the area around the transmission drain plug to prevent debris from entering the transmission case. Remove the drain plug and allow the transmission oil to drain into a clean container having a capacity of more than 5 quarts. Reinstall the drain plug. Refer to Figure 22.

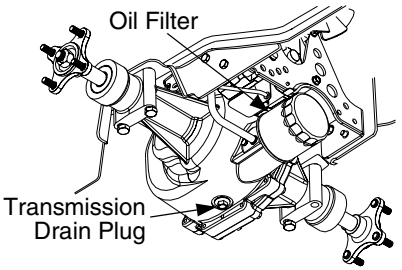


Figure 22

- Clean around the base of the transmission oil filter and remove the filter by turning it counterclockwise.
- Apply a light coating of clean transmission oil to the gasket of the new filter. Install the filter by turning it clockwise, by hand, until the gasket contacts the filter base on the transmission housing; then tighten the filter an additional 1/2 turn.
- Clean the area around the Transmission Oil Fill/Dipstick to prevent debris from entering the transmission case.
- Remove the dipstick and slowly pour oil into the oil fill tube. Fill the transmission case until the oil level reaches the “Full” mark on dipstick.
- Reinstall the dipstick securely into the oil fill tube.
- Start the engine and allow it to run for a few minutes. Shut the engine off, then check for leaks and recheck the oil level in the transmission case.

Important Information: The service life and reliability of any machine depends upon the care it is given. Proper lubrication is a very important part of that care. The maintenance schedule reflects the minimal requirements to maintain the equipment. More frequent inspections and maintenance is preferable.

Using the lubrication illustration as a guide, make certain that all lubrication fittings are installed and functioning.

Be sure all fittings are free from dirt and paint so the lubricant is certain to enter the bearing.

Using a pressure lubricating gun, always force the lubricant through the full length of each bearing until it emerges at the end, carrying with it the worn lubricant and any dirt that may have entered the bearing.

Miscellaneous working parts not provided with lubrication fittings should be oiled regularly with a good grade of lubricating oil.

Always lubricate the tractor thoroughly before taking it to a remote location for a prolonged period of time.

Lubricant is cheap. Use plenty of it. Worn parts can be expensive to replace.

Keep your supply of lubricating oil and grease stored in clean containers, and covered to protect from dust and dirt.

Keep the lubricating gun nozzle clean and wipe dirt from the grease fittings before lubricating.

Electrical Box

The electrical box contains the relay and fuses. Refer to Figure 23 for the electrical box layout. The electrical box is located under the upper bulkhead in front of the dash panel. To access the electrical box:

- Raise the hood of the tractor
- Locate the locking tabs on the left and right side of the upper bulkhead.
- Pull up on the tabs and lift the upper bulkhead from the tractor.
- Lift the locking tab and remove the cover from the electrical box.

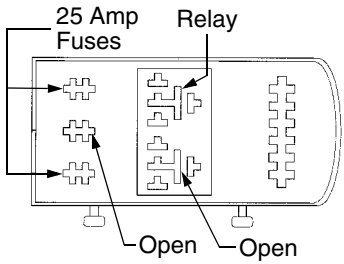


Figure 23

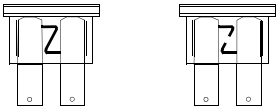
Fuse

Fuses are installed to protect the tractor's electrical system from damage caused by excessive amperage.

Always use the same capacity fuse for replacement. Refer to the Specifications Chart. If the electrical system does not function, check the fuses.

To replace a fuse, note the position of the fuse and pull the old fuse from the electrical box.

Compare the suspect fuse with Figure 24 to determine if is good or bad.



GOOD BAD

Figure 24

Install the new fuse in the position from which the old fuse was removed.

Off-Season Storage

If the machine is to be inoperative for a period longer than 30 days, the following procedures are recommended:

WARNING: Never store the tractor with fuel in the tank, indoors or in poorly ventilated enclosures where fuel fumes may reach an open flame, spark or pilot light (e.g.: furnace, water heater, clothes dryer, etc.).

WARNING: Fuel left in the fuel tank deteriorates and will cause serious starting problems.

To prevent gum deposits from forming inside the engine's carburetor and causing possible malfunction of the engine, the fuel system must be either completely emptied, or the gasoline must be treated with a stabilizer to prevent deterioration.

1. If using a fuel stabilizer:
   - Read the product manufacturer's instructions and recommendations.
   - Add to clean, fresh gasoline the correct amount of stabilizer for the capacity of the fuel system.
   - Fill the fuel tank with treated fuel and run the engine for 2-3 minutes to get stabilized fuel into the carburetor.
2. If emptying the fuel system:
   - Towards end of the season, monitor fuel consumption with the goal of running the fuel tank to empty.
   - If a large volume of fuel is left over, remove the fuel cap and siphon the bulk of any leftover fuel into an approved container.
   - Run the engine until it starts to falter, then use the choke to keep the engine running until all fuel in the carburetor has been exhausted.
3. Perform the following procedures before storing the machine.
   - Remove the spark plugs and pour one (1) ounce of engine oil through the spark plug holes into the cylinders. Install the spark plugs but do not connect the plug wires. Crank the engine two or three revolutions to distribute the oil.
   - Clean the engine and the entire tractor thoroughly.
   - Lubricate all lubrication points.
   - Prepare the battery for storage.
   - Protect the tires and seat from sunlight. Regularly check the tires for proper inflation.

NOTE: *With the exception of utilizing the deck wash feature on the mower decks, we do not recommend the use of a pressure washer or garden hose to clean your tractor. Water may cause damage to electrical components; pulleys; bearings; or the engine.*

SECTION 10: ENGINE INFORMATION

KOHLER CO.
FEDERAL AND CALIFORNIA EMISSION CONTROL SYSTEMS
LIMITED WARRANTY
SMALL OFF-ROAD EQUIPMENT ENGINES

The U.S. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and Kohler Co. are pleased to explain the Federal and California Emission Control Systems Warranty on your small off-road equipment engine (herein engine). For California, engines produced in 1995 and later must be designed, built and equipped to meet the state's stringent anti-smog standards. In other states, 1997 and later model year engines must be designed, built and equipped, to meet the U.S. EPA regulations for small non-road engines. The engine must be free from defects in materials and workmanship which cause it to fail to conform with U.S. EPA standards for the first two years of engine use from the date of sale to the ultimate purchaser. Kohler Co. must warrant the emission control system on the engine for the period of time listed above, provided there has been no abuse, neglect or improper maintenance.

The emission control system may include parts such as the carburetor or fuel injection system, the ignition system, and catalytic converter. Also included are the hoses, belts and connectors and other emission related assemblies.

Where a warrantable condition exists, Kohler Co. will repair the engine at no cost, including diagnosis (if the diagnostic work is performed at an authorized dealer), parts and labor.

MANUFACTURER'S WARRANTY COVERAGE

Engines produced in 1995 or later are warranted for two years in California. In other states, 1997 and later model year engines are warranted for two years. If any emission related part on the engine is defective, the part will be repaired or replaced by Kohler Co. free of charge.

OWNER'S WARRANTY RESPONSIBILITIES

(a) The engine owner is responsible for the performance of the required maintenance listed in the owner's manual. Kohler Co. recommends that you retain all receipts covering maintenance on the engine. But Kohler Co. cannot deny warranty solely for the lack of receipts or for your failure to assure that all scheduled maintenance was performed.

(b) Be aware, however, that Kohler Co. may deny warranty coverage if the engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

(c) For warranty repairs, the engine must be presented to a Kohler Co. service center as soon as a problem exists. Call 1-800-544-2444, or access our web site at: www.kohlerengines.com, for the names of the nearest service centers. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding warranty rights and responsibilities, you should contact Kohler Co. at 1-920-457-4441 and ask for an Engine Service representative.

COVERAGE

Kohler Co. warrants to the ultimate purchaser and each subsequent purchaser that the engine will be designed, built and equipped, at the same time of sale, to meet all applicable regulations. Kohler Co. also warrants to the initial purchaser and each subsequent purchaser, that the engine is free from defects in material and workmanship which cause the engine to fail to conform with applicable regulations for a period of two years.

Engines produced in 1995 or later are warranted for to years in California. For 1997 and later model years, EPA requires manufacturers to warrant engines for two years in all other states. These warranty periods will be begin on the date the engine is purchased by the initial purchaser. If any emission related part on the engine is defective, the part will be replaced by Kohler Co. at no cost to the owner. Kohler Co. is liable for damages to other engine components caused by the failure of a warranted part still under warranty.

Kohler Co. shall remedy warranty defects at any authorized Kohler Co. engine dealer or warranty station. Warranty repair work done at an authorized dealer or warranty station shall be free of charge to the owner if such work determines that a warranted part is defective.

Listed below are the parts covered by the Federal and California Emission Control Systems Warranty. Some parts listed below may require scheduled maintenance and are warranted up to the first scheduled replacement point for that part. The warranted parts are:

- Carburetor assembly
- Throttle body (EFI system - if equipped)
- Catalytic muffler (if equipped)
- Fuel metering valve (if equipped)
- Crankcase breather
- Fuel pressure regulator (EFI system-if equipped)
- Ignition module(s) with high tension lead
- Spark advance module (if equipped)
- Oxygen, speed, throttle position, and temperatue sensors (if equipped)
- Electronic control unit (if equipped)
- Fuel injectors (EFI system - if equipped)
- Air filter, fuel filter, and spark plugs (only to first scheduled replacement point)

LIMITATIONS

This Emission Control System Warranty shall not cover any of the following:

(a) repair or replacement required because of misuse or neglect, improper maintenance, repairs improperly performed or replacement not conforming to Kohler Co. specifications that adversely affect performance and/or durability, and alterations or modifications not recommended or approved in writing by Kohler Co.,

(b) replacement of parts and other services and adjustments necessary for required maintenance at and after the first scheduled replacement point,

(c) consequential damages such as loss of time, inconvenience, loss of use of the engine or equipment, etc.,

(d) diagnosis and inspection fees that do not result in eligible warranty service being performed, and

(e) any add-on or modified part, or malfunction of authorized parts due to the use of add-on or modified parts.

MAINTENANCE AND REPAIRS REQUIREMENTS

The owner is responsible for the proper use and maintenance of the engine. Kohler Co. recommends that all receipts and records covering the performance of regular maintenance be retained in case questions arise. If the engine is resold during the warranty period, the maintenance records should be transferred to each subsequent owner. Kohler Co. reserves the right to deny warranty coverage if the engine has not been properly maintained; however, Kohler Co. may not deny warranty repairs solely because of the lack of repair maintenance or failure to keep maintenance records.

Normal maintenance, replacement or repair of emission control devices and systems may be performed by any repair establishment or individual; however, **warranty repair must be performed by a Kohler authorized service center**. Any replacement part or service that is equivalent in performance and durability may be used in non-warranty maintenance or repairs, and shall not reduce the warranty obligations of the engine manufacturer.

Cleaning The Engine

This tractor has an air-cooled engine. Air must be able to circulate freely around the engine through the flywheel screen, through the cooling shrouds and over the fins of the cylinder head and cylinder block. Keep these areas free of accumulated dirt and debris or the engine will overheat; possibly causing extensive engine damage. Regularly clean the inside of the side panels, dash intake screen and grille to ensure adequate cooling. If debris has accumulated inside the cooling shrouds, the blower housing and cooling shrouds should be removed and the cooling fins cleaned.

WARNING: This machine is designed to cool properly with the side panels in place. Operating without the panels could cause premature accumulation of dirt and debris on the engine, resulting in inadequate cooling.

WARNING: Keep the muffler area clean. Before running the engine, clean the muffler area to remove all combustible debris. Inspect the muffler area often when mowing during the Fall season.

Checking Engine Oil Level

Before each use, the oil level of the engine crankcase should be checked to see that it is filled to the correct level. Close monitoring of the oil level during the first 10 hours of operation of the engine is especially important and the oil level should be checked **EVERY HOUR** during the first five hours of operation.

Before checking the oil level, clean the area around the oil level dipstick to prevent debris from entering the crankcase. See Figure 26. Always keep the oil level between the “FULL” and the “ADD” marks on the dipstick. See Figure 25.

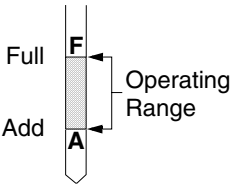


Figure 25

When checking the oil level, the engine must be cold, the dipstick must be withdrawn and wiped clean, then inserted all the way into the tube before being withdrawn for a true reading.

Check the oil level only while the engine is stopped and the tractor is level.

Adding Engine Oil

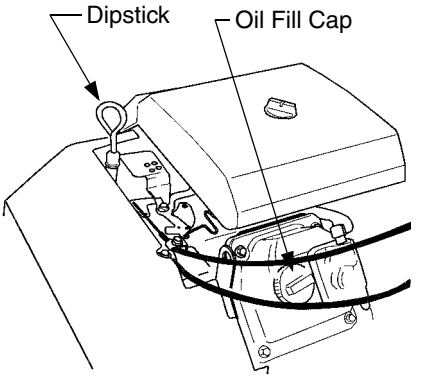


Figure 26

WARNING: Never overfill the engine crankcase. The engine may overheat and/or damage may result if the crankcase is below the “ADD” mark or over the “FULL” mark on the dipstick. For best results, fill to the “FULL” mark on the dipstick as opposed to adding a given quantity of oil. Always check the level on the dipstick before adding more oil.

Refer to Figure 27 for information regarding the proper type of oil to add to the crankcase.

- Place the tractor on a level surface and engage the parking brake. Stop the tractor engine and remove the ignition key.
- Clean the area around the oil filler cap to prevent debris from entering the crankcase. See Figure 26.
- Remove the oil filler cap from the left valve cover and SLOWLY pour in oil. Fill the crankcase until the oil level reaches the “FULL” mark on the dipstick. See Figure 25.
- Reinstall the oil filler cap and turn to the right to tighten securely in the valve cover.

WARNING: The oil filler cap must be tightened securely into the valve cover at all times when the engine is operating. Severe engine damage could result from failure to do so.

Changing Engine Oil

WARNING: If the tractor has recently been operated, the engine and surrounding areas may be hot. Use caution not to burn yourself when working around the engine.

The oil filter should be changed at every oil change interval. The filters can be obtained through your Cub Cadet dealer. See the Quick Reference Chart on page 48 for the correct part number. Refer to the **MAINTENANCE CHART** on page 23 and the **SPECIFICATIONS TABLE** on page 40 for information regarding the frequency of required oil changes and the quantity of oil needed.

See the VISCOSITY CHART in Figure 27 for the proper type of oil.

Above +32° F	SAE 10W30
Below +32° F	SAE 5W20 SAE 5W30

Figure 27

The oil filter is located behind the left side panel and is mounted on the engine. See Accessing Engine Compartment on page 25 for details on removing the side panels.

Run the engine for a few minutes to warm the oil in the crankcase. Warm oil will flow more freely and carry away more engine impurities. Use care to avoid burns from hot oil. While the engine oil is warm, proceed as follows:

NOTE: *A length of flexible tubing is supplied with the tractor and should be used to drain the engine oil.*

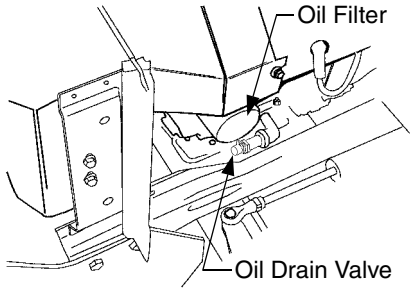


Figure 28

- Place the tractor on a level surface and engage the parking brake. Stop the tractor engine and remove the ignition key.
- Clean around the base of the oil filter, the oil filler cap, and the dipstick tube to prevent debris from entering the crankcase. See Figure 26 and Figure 28.
- Unseat the plastic dust cap from the engine oil drain valve. To prevent loss of the cap, do not remove the cap’s retaining ring from the drain valve. Remove the dipstick.

- Attach the flexible tubing to the drain valve. Place an appropriate container below the open end of the tubing to collect the old oil.
- To open the drain valve, push it slightly inward and turn it counterclockwise until it stops, then pull it outward.
- Remove the filter by turning it counterclockwise using an automotive type filter wrench to loosen.
- Allow the old oil to completely drain from the engine crankcase into the container below. To close the drain valve, push it inward, turn clockwise until it stops and then release it.
- Remove the flexible tubing from the drain valve. Clean the tubing and store in a safe place for future use.
- Clean the drain valve and push the plastic dust cap onto the valve.
- Turn the replacement filter open end up and pour new oil into the filter through the threaded center hole. Fill to the bottom of the threads, then wait a minute or two to allow the oil to be absorbed into the filter material.
- Apply a light coating of clean oil on the gasket of the new oil filter. Thread the filter on by hand until the gasket contacts the oil filter adapter, then tighten the oil filter an additional **2/3 to 1** turn.
- Refill the crankcase with the appropriate quantity and type of oil.
- Check oil level and make sure that oil filler cap, dipstick and drain valve are in place and closed.

Sparkplugs

WARNING: To avoid possible injury, be sure the engine is off and has cooled before making any adjustments or repairs.

Remove all dirt from around the spark plug before removing.

Use a spark plug wrench to remove the spark plugs.

Check the gap after every 100 hours of operation.

Replace a defective plug with a new plug. Set the spark plug gap at .030 inch. Tighten the plug to 18-22 ft-lbs. See your authorized dealer for the correct replacement plug.

Changing Fuel Filter

WARNING: Do not replace fuel filter when engine is hot.

The engine is equipped with an in-line fuel filter. Visually inspect the filter periodically for a build-up of residue inside the filter body, and for a dirty element which can be indicated by discoloration. Replace the fuel filter when dirty.

Changing Air Cleaner

Check the air cleaner daily or before starting the engine. Check for loose or damaged components and check the condition of the filter element. Remove any buildup of dirt and debris in the air cleaner housing.

See Figure 29 for assembly of the Air cleaner elements.

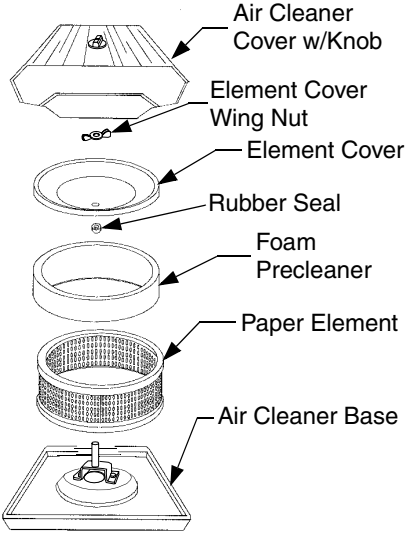


Figure 29

WARNING: Operating the engine with loose or damaged air cleaner components will allow unfiltered air into the carburetor, causing extensive wear and eventual failure of the engine.

Servicing The Precleaner

Wash and re-oil the foam precleaner more often under extremely dusty or dirty conditions. See Figure 29.

- Loosen the aircleaner cover knob and remove the cover.
- Remove the foam precleaner by sliding it up off the paper element.
- Wash the precleaner in warm water with detergent. Rinse the precleaner thoroughly until all traces of the detergent are eliminated. Squeeze out (do not wring) excess water in a dry cloth. Allow the precleaner to air dry.
- Saturate the foam precleaner with new engine oil. Squeeze out all excess oil in a dry cloth.
- Reinstall the foam precleaner over the paper element.
- Reinstall the air cleaner cover and tighten the retaining knob to secure.

Servicing The Paper Element

Inspect and replace the paper element as necessary. See Figure 29.

- Loosen the air cleaner cover knob and remove the cover.
- Remove the foam precleaner by sliding it up off the paper element.
- Clean the area around the element to prevent debris from getting into the engine when the element is removed.
- Loosen and remove the element cover wing nut.
- Remove the air filter element and element cover by lifting straight up.
- Do not wash the paper element or use pressurized air, as this will damage the element. Replace a dirty, bent or damaged element. Handle new elements carefully; do not use if the sealing surfaces are bent or damaged.
- When servicing the air cleaner, check the air cleaner base. Make sure it is secured and not bent or damaged. Check the element cover plate for damage or improper fit. Also check the rubber seal for damage or deterioration. Replace all damaged air cleaner components.
- Reinstall the paper element, foam precleaner, cover plate and element cover wing nut.
- Reinstall the air cleaner cover and tighten the retaining knob to secure.

IMPORTANT: *Properly maintained air cleaner elements significantly contribute to prolonging engine life.*

SECTION 11: TROUBLE SHOOTING

Possible Cause	Possible Remedy
Hard To Start	
No fuel in fuel tank or carburetor	Fill the tank with fuel. Check the fuel line, carburetor and fuel filter.
Fuel line or carburetor clogged	Clean the fuel line and carburetor with a commercial carburetor cleaner.
Fuel filter plugged	Replace
Water in fuel	Drain the fuel tank and carburetor. Use new fuel and dry the sparks plugs.
Choked improperly. Flooded engine	Follow the starting instructions.
Defective ignition or loose wiring	Check the wiring, spark plugs or fuse.
Defective battery	Check and service. Refer to "**BATTERY**."
Spark plug dirty or improperly gapped	Clean, adjust the gap to .030-inch or replace the plug.
Engine Operates Irregularly or Knocks	
Engine incorrectly timed	See your authorized dealer.
Spark plug dirty; wrong gap or wrong type	Clean, reset the gap or replace
Poor or weak spark	Check the spark plugs and wiring.
Carburetor setting incorrect	See your authorized dealer.
Poor grade fuel or water in fuel	Drain and use a good grade of clean fuel.
Engine overheating	Refer to "**MAINTENANCE**."
Engine valves at fault	See your authorized dealer.
Engine smokes	See your authorized dealer.
Oil level rises due to fuel in the crankcase	See your authorized dealer.
Air filter becomes oil and fuel soaked	See your authorized dealer.
Engine leaks oil	See your authorized dealer.
Misfiring	See your authorized dealer.
Other engine problems	See your authorized dealer.
Excessive oil in air cleaner	Be sure that oil dipstick is fully seated, oil fill cap is tight, and all excess oil is squeezed out of the pre-cleaner.
PTO Clutch Will Not Engage	
Reverse pedal is partially depressed	Depress brake pedal.
Vacuum actuator not energized	Check PTO switch and connections, check for worn or broken wiring.
Vacuum leak	Check vacuum lines.
Lack of Power	
Air cleaner clogged	Service the air cleaner element. Refer to "**MAINTENANCE**."
Engine overload	Reduce the load.
Engine overheated	Make sure the air intake screen, shrouding, engine fins, side panels, dash intake screen and grille are free of accumulated dirt and debris. Refer to "**MAINTENANCE**."

Possible Cause	Possible Remedy
Fuel tank air vent clogged	Remove obstruction from the vent in the fuel tank cap.
Air leakage between carburetor and engine	Remove air cleaner. Tighten the carburetor and manifold mounting hardware. Replace any damaged parts as indicated in “**MAINTENANCE**.”
Incorrect timing or faulty ignition	See your authorized dealer.
Brake dragging	Adjust the brakes. Refer to “**ADJUSTMENTS**.”
Insufficient cooling air — dirt or debris clogging the: air intake screen • shrouds • cooling fins • side panels • dash intake screen • or grille	Keep the air intake area, side panels, grille, dash intake screen and cooling fins clean. Refer to “**MAINTENANCE**.”
Oil level incorrect	Engine oil level must not be over the “FULL” mark or below the “ADD” mark on dipstick. Refer to “**MAINTENANCE**.”

SECTION 12: OPTIONAL EQUIPMENT

When you purchased your tractor, you probably had it completely equipped for your particular needs at that time. However, later you may wish to obtain optional equipment or accessories. These items and other allied equipment can be purchased from, and installed by, your authorized Cub Cadet dealer.

This tractor can be used for many different types of work, and because it is called on to operate under many different conditions, a variety or equipment is available to adapt it to the requirements of the user. Refer to the optional equipment chart below for a list of products available at the time of printing.

Description	Model Number
44" Mower Deck	190-209-100
48" Mower Deck (Until Inventory is Exhausted)	190-289-100
54" Mower Deck	190-295-100
50" Mower Deck	190-394-100
Mechanical Angling Kit (1)	190-171-100
Hydraulic Angling Kit (1)	190-288-100
Front Hitch System	190-343-100
Grass Collection System (44" Deck)	190-212-100
Grass Collection System (48" Deck)	190-217B-100
Grass Collection System (190-295 54" Deck Only)	190-367-100
54 Inch Blade (2)	190-352-100
Snow Thrower (1)	190-353-100
3 Point Hitch	190-207-100
Hydraulic Tiller (3)	190-004-100
46" Lawn Sweeper	190-459-100
10 Cu. Ft. Dump Cart	190-653-100
15 Cu. Ft. Dump Cart	190-458-100
17 Cu. Ft. H.D. Dump Cart	190-425-100

(1) Requires front hitch system 190-343-100.

(2) Requires front hitch system 190-343-100. Can use optional Mechanical Angling Kit 190-171-100 or Hydraulic Angling Kit 190-288-100.

(3) Requires 3 point hitch 190-207-100

SECTION 13: SPECIFICATIONS

Engine

Manufacturer	Kohler
Horsepower	23
Cylinders	2 (Command)
Cooling	Air
Fast Idle Speed	3600
Slow Idle Speed	1200
Displacement (cubic inches)	41.1
Compression Ratio	8.5:1
Spark Plug	RC12YC (Champion or equivalent)
Oil Filter	Cartridge
Crank Case Capacity	64 oz.

Electrical System

Charging System	Flywheel-Alternator
Capacity	15 Amp Regulated
Battery Type	Lead Acid
Battery Cold Cranking Amps at 0° F	435
Ignition	Battery
Fuses (auto type)	25 amp
Battery Voltage	12 Volts

Fuel System

Fuel Tank Capacity (gallons)	4.5
Type of Fuel	Unleaded
Fuel Filter	In-line

Drive Train

Transmission	Hydrostatic
Transmission Oil	Cub Cadet Drive System Fluid Plus
Transmission Oil Capacity	5.5 Qts.

Tires

Front (inches)	16 x 6.5 - 8
Rear (inches)	23 x 9.5 - 12

Dimensions and Weight

Wheelbase	49.5 in.
Overall Length	72.25 in.
Overall Width (w/o Mower Deck)	42 in.
Height	43.6 in.
Weight (w/o Mower Deck)	Approx. 795 lbs.
Turning Radius	27 in.
Ground Clearance	6 in.

Brakes

Type	External Disk
Parking	Foot Actuated - Hand Locked

PTO Clutch

Type	E-Vac System

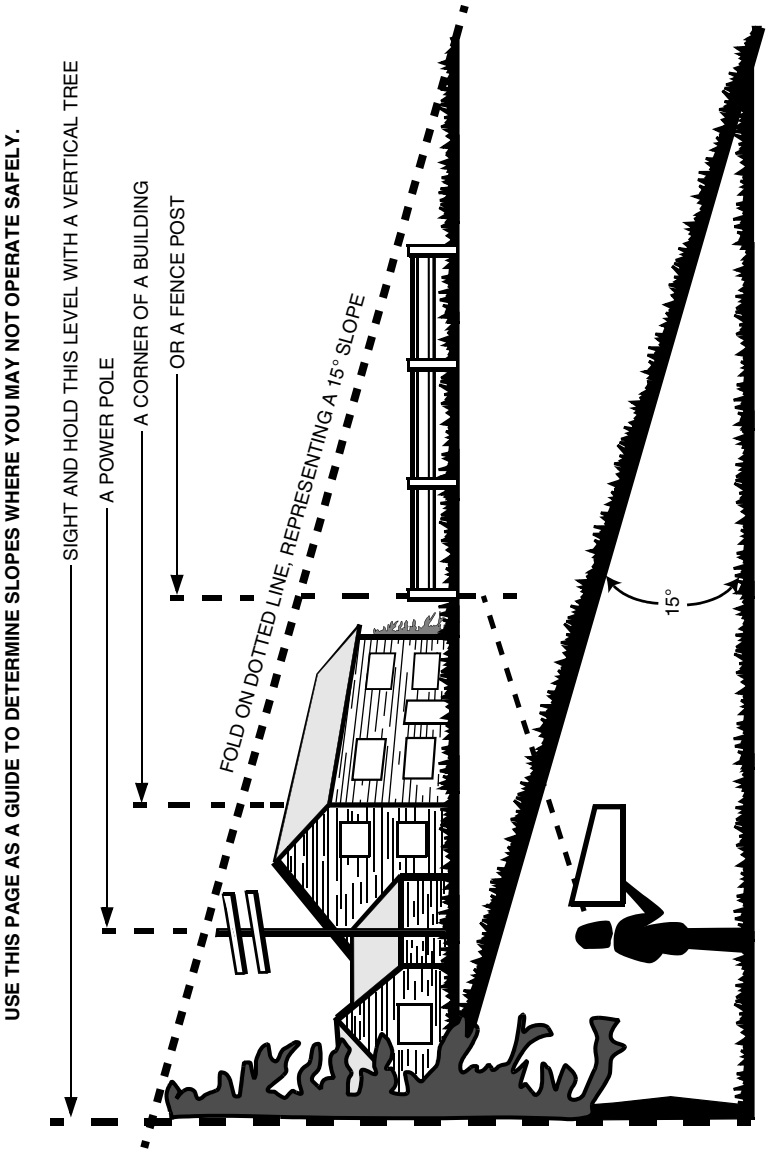
Attachment Lift System

Type	Hydraulic

SECTION 14: SLOPE GAUGE

WARNING: Do not mow on inclines with a slope in excess of 15 degrees (a rise of approximately 2-1/2 feet every 10 feet). A riding mower could overturn and cause serious injury. If operating a walk-behind mower on such a slope, it is extremely difficult to maintain your footing and you could slip, resulting in serious injury.

- Operate RIDING mowers up and down slopes, never across the face of slopes.
- Operate WALK-BEHIND mowers across the face of slopes, never up and down slopes.


USE THIS PAGE AS A GUIDE TO DETERMINE SLOPES WHERE YOU MAY NOT OPERATE SAFELY.
SIGHT AND HOLD THIS LEVEL WITH A VERTICAL TREE
A POWER POLE
A CORNER OF A BUILDING
OR A FENCE POST
FOLD ON DOTTED LINE, REPRESENTING A 15° SLOPE
15°

CUB CADET LLC
MANUFACTURER'S ONE YEAR LIMITED WARRANTY
(COMMERCIAL USE)

The limited warranty set forth below is given by CUB CADET LLC ("CUB CADET") with respect to new merchandise purchased and used in the United States, its possessions and territories.

CUB CADET warrants this product against defects in material and workmanship for a period of **one** (**1**) year for commercial users, commencing on the date of original purchase and will, at its option, repair or replace, free of charge, any part found to be defective in material or workmanship. This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water or damage because of other peril or natural disaster. Damage resulting from installation or use of any part, accessory, or attachment not approved by Cub Cadet for use with the Product(s) covered by this manual will void your warranty as to any resulting damage.

Batteries and belts are subject to separate terms as follows:

a. Batteries have a one-year prorated limited warranty with 100% replacement during the first three months. After three months, the battery replacement credit is based on the months remaining in the twelve (12) month period dating back to the original date of sale. Any replacement battery will be warranted only for the remainder of the original warranty period.

b. All belts are covered by a one (1) year limited warranty against defects in material and workmanship.

HOW TO OBTAIN SERVICE: Warranty service is available, WITH PROOF OF PURCHASE, THROUGH YOUR LOCAL AUTHORIZED CUB CADET DEALER. To locate the dealer in your area, please check for a listing in the Yellow Pages or contact CUB CADET at P.O. Box 361131, Cleveland, Ohio 44136-0019, or call 1-877-282-8684, or log on to our Web site at www.cubcadet.com.

This limited warranty does not provide coverage in the following cases:

a. Routine maintenance items such as lubricants, filters, blade sharpening and tune-ups, or adjustments such as brake adjustments, clutch adjustments or deck adjustments; and normal deterioration of the exterior finish due to use or exposure.

b. Normal wear parts or components, including blades, blade adapters, grass bags, rider deck wheels, seats, snow thrower skid shoes, shave plates and tires.

c. CUB CADET does not extend any warranty for products sold or exported outside of the United States of America, its possessions and territories, except those sold through CUB CADET'S authorized channels of export distribution.

d. Replacement parts that are not genuine Cub Cadet parts.

e. Service completed by someonte other than an authorized service dealer.

No implied warranty, including any implied warranty of merchantability or fitness for a particular purpose, applies after the applicable period of express written warranty above. No other express warranty or guaranty, whether written or oral, except as mentioned above, given by any person or entity, including the dealer, with respect to any product shall bind CUB CADET. During the period of the Warranty, the exclusive remedy is repair or replacement of the product as set forth above. (Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.)

The provisions as set forth in this Warranty provide the sole and exclusive remedy arising from the sale. CUB CADET shall not be liable for incidental or consequential loss or damages including, without limitation, to any claim for loss of profits, loss of savings or revenue, loss of the use of the equipment or any associated equipment, facilities or service, downtime, the claims or costs of third parties including customers, and injury to property, and further including expenses incurred for substitute or replacement lawn care services, for transportation or for related expenses, or for rental expenses to temporarily replace a warranted product. (Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you.)

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. Alteration of the safety features of the product shall void this Warranty. You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the use or misuse or inability to use the product.

This limited warranty shall not extend to anyone other than the original purchaser or original lessee.

How State Law Relates to this Warranty: This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

IMPORTANT: Owner must present Original Proof of Purchase to obtain warranty coverage.

Cub Cadet LLC, P.O. Box 361131 Cleveland, Ohio 44136-0019;
Phone 1 877-282-8684

CUB CADET LLC
MANUFACTURER'S LIMITED WARRANTY
(RESIDENTIAL USE)

The limited warranty set forth below is given by CUB CADET LLC ("CUB CADET") with respect to new merchandise purchased and used in the United States, its possessions and territories.

CUB CADET warrants this product against defects in material and workmanship for a period of two (2) years commencing on the date of original purchase and will, at its option, repair or replace, free of charge, any part found to be defective in material or workmanship. This limited warranty shall only apply if this product has been operated and maintained in accordance with the Operator's Manual furnished with the product, and has not been subject to misuse, abuse, commercial use, neglect, accident, improper maintenance, alteration, vandalism, theft, fire, water or damage because of other peril or natural disaster. Damage resulting from installation or use of any part, accessory, or attachment not approved by Cub Cadet for use with the product(s) covered by this manual will void your warranty as to any resulting damage.

Batteries and belts are subject to separate terms as follows:

a. Batteries have a one-year prorated limited warranty with 100% replacement during the first three months. After three months, the battery replacement credit is based on the months remaining in the twelve (12) month period dating back to the original date of sale. Any replacement battery will be warranted only for the remainder of the original warranty period.

b. All belts are covered by a one (1) year limited warranty against defects in material and workmanship.

5 Year/500 Hour Limited Warranty

CUB CADET warrants the frame, front cast iron pivot axle and drive shaft on Series 2000 and 3000 models against defects in material and workmanship for a period of five (5) years or 500 hours, whichever occurs first, for residential users, commencing on the date of original purchase or lease and CUB CADET will, at its option, repair or replace, free of charge, any part found to be defective in material or workmanship provided this product has been operated and maintained as set forth above. In addition to any other reason set forth herein, CUB CADET may deny warranty coverage if the hour meter, or any part thereof, is altered, modified, disconnected or otherwise tampered with.

HOW TO OBTAIN SERVICE: Warranty service is available, WITH PROOF OF PURCHASE, THROUGH YOUR LOCAL AUTHORIZED CUB CADET DEALER. To locate the dealer in your area, please check for a listing in the Yellow Pages or contact CUB CADET by calling 1-877-282-8684 or writing to P.O. Box 361131, Cleveland, Ohio 44136-0019. You may also log on to our Web site at www.cubcadet.com.

This limited warranty does not provide coverage in the following cases:

a. Routine maintenance items such as lubricants, filters, blade sharpening and tune-ups, or adjustments such as brake adjustments, clutch adjustments or deck adjustments; and normal deterioration of the exterior finish due to use or exposure.

b. CUB CADET does not extend any warranty for products sold or exported outside of the United States of America, its possessions and territories, except those sold through CUB CADET'S authorized channels of export distribution.
c. Normal wear parts or components, including blades, blade adapters, grass bags, rider deck wheels, seats, snow thrower skid shoes, rubber auger spirals, shave plates and tires.
d. Replacement parts that are not genuine Cub Cadet parts.
e. Service completed by someone ther than an authorized service dealer.
f. Transportation charges and service calls.

No implied warranty, including any implied warranty of merchantability or fitness for a particular purpose, applies after the applicable period of express written warranty above as to the parts as identified. No other express warranty or guaranty, whether written or oral, except as mentioned above, given by any person or entity, including the dealer or retailer, with respect to any product shall bind CUB CADET. During the period of the Warranty, the exclusive remedy is repair or replacement of the product as set forth above. (Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.)

The provisions as set forth in this Warranty provide the sole and exclusive remedy arising from the sales. CUB CADET shall not be liable for incidental or consequential loss or damages including, without limitation, expenses incurred for substitute or replacement lawn care services, for transportation or for related expenses, or for rental expenses to temporarily replace a warranted product. (Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.)

In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold. Alteration of the safety features of the product shall void this Warranty. You assume the risk and liability for loss, damage, or injury to you and your property and/or to others and their property arising out of the use or misuse or inability to use the product.

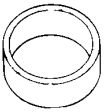
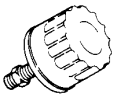
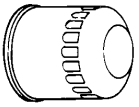
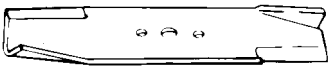
This limited warranty shall not extend to anyone other than the original purchaser or to the person for whom it was purchased as a gift.

How State Law Relates to this Warranty: This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

IMPORTANT: Owner must present Original Proof of Purchase to obtain warranty coverage.

Cub Cadet LLC, P.O. Box 361131 Cleveland, Ohio 44136-0019;
Phone 1 877-282-8684

SECTION 15: QUICK REFERENCE PARTS

Description	Part Number
Engine Oil	737-3030A (10W30) 737-3049 (5W30)
Air Filter **CARTRIDGE**	KH-47-083-03
 **FOAM PRE-CLEANER**	KH-24-083-02
Engine Oil Filter 	KH-12-050-08
Spark Plug	759-3336
Transmission Oil	Cub Cadet Drive System Fluid Plus 737-3120 - Quart 737-3121 - Gallon
Transmission Oil Filter 	923-3014
Mower Deck Blades 	44” Deck -759-3939 (3) 48” Deck -759-3826 (3) 54” Deck -759-3820 (3) 50” Deck -759-04047 (3)
Mower Deck Belts	44” Deck - 954-3098 48” Deck - 954-3053 54” Deck - 954-0197 50” Deck - 954-0295
PTO Belt (set of 2)	954-3084